



Press release

# Swiss Space Systems – S3 is strengthening its network of partners towards first launch in 2018

# • Memorandum of understanding between Swiss Space Systems and Elecnor Deimos

Madrid, 26 June 2013. Swiss Space Systems – S3, the new Swiss aerospace company, was officially launched on 13 March this year. Its goal is to develop, manufacture, certify and operate unmanned suborbital shuttles to launch small satellites up to 250 kg by 2018. Today the firm is announcing the signature of a broad scope memorandum of understanding as further step in the cooperation with Elecnor Deimos established earlier this year. This partnership will allow S3 to count on DEIMOS as key technology supplier and strategic partner, leveraging on its experience in space programmes for the development of a new generation small satellites launch system, and then enter the next stage of developing a manned version of its suborbital shuttle.

### Work is progressing to schedule

Following the official launch of the company in March, the development work is going smoothly and S3's 40 or so employees are making rapid progress with the help of their partners and technical advisers, whose specifications have been defined and complied with. The technical data relating to the shape of the shuttle, its trajectory and the physical and thermal constraints are being validated through detailed numerical simulation by a team composed by S3, ESA and DEIMOS engineers, prior to the first wind tunnel tests which will take place at the Von Karman Institute in Belgium in July. **A stronger international network of partners and advisers** 

To reach its goal of launching small lower-cost satellites so as to broaden access to space for companies, universities and countries that could not afford it hitherto, S3 already benefits from the valuable support of prestigious partners. The French Dassault Aviation, consultant aircraft maker for the shuttle's systems architecture, is one of them, as are the Belgian Sonaca for the external structure, Space Application Services for the flight software and the Von Karman Institute for the wind tunnel. Other partners are the Spanish Elecnor Deimos for mission and GNC system engineering, the Swiss Meggitt for the sensors, the Italian Thales Alenia Space for pressurised modules and Spaceport Malaysia for the ground infrastructure. The technical advisers are the European Space Agency (ESA), the Swiss Space Center to which the EPFL belongs, and Louvain (Belgium) and Stanford (USA) universities. The main sponsor is Breitling, the Swiss watchmaker.



Today Swiss Space Systems is pleased to announce the reinforcement of partnership with Elecnor Deimos a young company but with already recognized experience in space. Since its foundation in 2001, the European Space Agency (ESA) has been its main customer in Earth Observation and Science Satellite Navigation, Launchers, Human Space Flight, and Exploration programs. DEIMOS provides ESA and main System Integrators with engineering services, development and operational systems integration for Space, Ground and User Segments.

## S3 and Elecnor Deimos to deliver an affordable and responsive access to Low Earth Orbit

The Memorandum of Understanding (MOU) between Elecnor Deimos and Swiss Space Systems will enable reinforcing the S3 project skills inheriting Mission and GNC System engineering capabilities acquired by DEIMOS in ESA programmes dealing with complex atmospheric missions like ESA IXV (Intermediate Experimental Vehicle, due for launch in 2014) and EXOMARS (European flagship mission to Mars, composed of two elements planned for launch in 2016 and 2018).

S3 will also count on DEIMOS facilities for the integration and testing of customer's SC in clean-room prior to the launch campaign. As a result, the cooperation will allow the two companies a faster access to the small satellite market, setting the S3 launch system a new paradigm for affordable and responsive access to Low Earth Orbit.

### Media contact:

Swiss Space Systems Grégoire Loretan Head of Communications Tel : +41 79 375 55 72 media@s-3.ch

**Elecnor Deimos** Juan Valdivia Santiago Head of Corporate Communication - Elecnor S.A. Tel.: 914 179 900 jvaldivia@elecnor.com

María José Acosta Commercial and Marketing – Elecnor Deimos Tel.: 34 918 063 450 maria-jose.acosta@elecnor-deimos.com



#### **About Elecnor Deimos**

Deimos is the Elecnor's technology branch, specialized in the design, engineering and development of solutions and system integration within the fields of space, information and communication technologies.

Elecnor Deimos develops activities such as Mission Analysis, System Engineering, Guidance, Navigation and Control (GNC), Attitude and Orbit Control (AOCS), Ground Segment Systems, On-board Software Systems, etc Elecnor Deimos participates in all phases of a space mission design and development, for the majority of ESA missions so the company gathers a considerable expertise and capabilities in Space Programmes incluiding the ability to carry out space missions, such as leading its own Earth Observation mission: DEIMOS-1 and DEIMOS-2.

www.elecnor-deimos.com

#### About Swiss Space Systems

Swiss Space Systems Holding is a Swiss company founded in Payerne in 2012, which groups and supervises the activities of its companies. Groupe S3 aims to develop, build, certify and operate suborbital shuttles to deploy small satellites up to 250 kg. The company currently has 40 employees and its overall budget up to the first satellite launch is around CHF 250 m. www.s-3.ch

